October 5, 2021

David W. Gray
Acting Regional Administrator
United States Environmental Protection Agency - Region 6
gray.david@epa.gov

RE: Ethylene Oxide Community Meeting with Sasol in West Lake, LA on September 30, 2021

Dear Mr. Gray:

On September 30, 2021, a meeting was held via Zoom with Concerned Citizens of Mossville and others in the surrounding areas to discuss the release of the known human carcinogen, Ethylene Oxide (EtO), by Sasol to the surrounding areas. There are a number of things that were presented at this meeting that I would like to bring to your attention.

- Background EtO – As it was explained during a test for EtO, monitors were set up both upstream and downstream of the EtO source. Downstream monitors were expected to have an EtO reading, but because upstream monitors picked up EtO during the test, this concentration was "thought" to be background. You cannot control how air travels, and you do not know if the wind shifted during the test, or if small-scale wind currents caused EtO that was moving downstream at some point to loop back around. Why is EPA spending so much time and resources on determining the source of low-level EtO concentrations, when we know that a much larger amount of EtO is being emitted from Sasol? If EPA's final determination is that a certain background amount of EtO exists, will the permits of Sasol and others be reduced by that amount, or will communities have to bear that additional burden also?

- Human Exposure Model (HEM) 4 – I read the risk assessment study using HEM 4 dated July 8, 2021, from Kelly Rimer to Jeffrey Robinson. My first concern is that it uses a 50 km radius from the source. The Mossville community is within 1-2 km radius. By including so many people in the risk evaluation, makes a fence line community like Mossville invisible or negligible. In Table A-8 in EPA's June 24, 2021 Region 6 Risk Assessment Report, the ~500 people who are at unacceptably high risk from Sasol (above EPA's 100 in a million threshold), representing the fence line community, are overshadowed by the ~250,000 people who don't live anywhere near Sasol.[1] It is not giving a true picture of the risk that the residents of Mossville face from EtO.

- It appears that EPA *removed* a census block from the ethylene oxide risk analysis for Sasol (220190027002, see page 19 of the June 2021 report), effectively hiding the risk faced by people who are still living in this census block. While this block includes a large section of Sasol's facility, it also includes peoples' homes, as EPA can plainly see from

[1] Available at https://www.epa.gov/system/files/documents/2021-07/region-6-risk-assessment-of-ethylene-oxide-emitting-facilities-in-texas-and-louisian-jul-8-2021.pdf.

satellite images (or by coming to visit Mossville). These are the closest residences to Sasol, and they should be at the center of EPA's risk assessment – instead they are completely left out of it.

- EPA did not adequately evaluate the risk posed by Sasol because it did not include enough receptors in its air dispersion model. EPA only included one receptor per census block. In our community, census blocks are geographically large, and there are only about 7 blocks that overlap with the 2-mile radius around Sasol, one of which was arbitrarily excluded from the model. This means that EPA only estimated EtO concentrations at a handful of locations within 2 miles of Sasol. Rather than including receptors up to 50 km from Sasol, EPA should conduct a more detailed assessment of the risk faced by the fence line community, using a receptor grid with 100 meter spacing.

- I am also concern about how the hourly rate of emission was obtained for the study? This was obtained by taking the annual reported amount and dividing it by the number of hours in a year. I contend that, that way gives facilities too much lead way for manipulation and dishonesty in the reporting. A facility could have 2-3 "bad weeks" in a year. A large amount of EtO gets released, within those 2-3 weeks, which had a dramatic effect on the fence line community. The rest of the year everything was fine. Those 2-3 "bad weeks" would be hidden in a risk assessment. EPA needs to figure out how to capture "bad weeks" so that they carry more weight and not get hidden in risk assessment.

- I am perplexed by Sasol's way forward, in that, they would have to test the vapor control unit for destructive and removal efficiency. This technology is already in use at the Shell Technology Center in Houston, TX. What testing is needed? I need clarification on why this equipment if installed, why is it being tested and not currently working. If it has not been installed, it needs to be installed immediately. Sasol's cancer risk for the area is 300 concerning EtO. I would expect for EPA Region 6 to move quickly as possible to protect human life and the environment, by demanding that this equipment is installed immediately and a firm date for its completion be documented.

- There are no plans to require fence line monitoring for EtO. Considering that Sasol's cancer risk for the area is 300 concerning EtO, this should be a requirement. EPA Region 3 is doing fence line monitoring in S. Charleston and Institute, West Virginia for EtO. It was also done for the affluent neighborhood of Willowbrook, Illinois for EtO, by EPA Region 5. Why can't EPA Region 6 conduct the same EtO monitoring for the small fence line community of Mossville?

- If a Hazard Quotient (HQ) for a chemical is equal to or less than 1, EPA believes there is no appreciable risk that non-cancer health effects will occur. Sasol Chemicals had an estimated HQ of 3 due primarily to chlorine emissions, and the respiratory system as the target organ. What are the plans of EPA Region 6 to insure that Sasol reduces its chlorine emissions to safe levels with regulations (including the time for this plan).

- The graph of changes in EtO since 2014 was very misleading. It gave the misrepresentation that the EtO emissions were 12,640 pounds in 2014, and there was a

reduction of 63% to 4,705 pounds in 2020. After checking recorded values in the LDEQ's emissions inventory for 2014, EtO emissions were only 2,225 pounds. So, instead of a reduction, Sasol has more than double its EtO emissions between 2014 – 2020.

EPA's most recent (April-June 2021) update for ethylene oxide outreach related to Sasol states that "EPA is currently focused on developing additional, more refined assessments." Please state the objective, methods, and timeline of these assessments.

I and other members of Concern Citizens of Mossville (CCOM) last met with Jonna Polk and other members of your staff on June 30, 2021. We presented our proposals about potential buyout options for the remaining residents of Mossville. There was supposed to be a follow up meeting to discuss the proposals that we presented, and new proposals from your staff, as well. We would like to have a meeting with you, before the holiday season starts. Not only can we discuss buyout proposals, but we can discuss my concerns in the bullet points mentioned above.

If you have any questions, please do not hesitate to contact me at (713) 876-6862, or CCOM's President, Carolyn Peters at (337) 564-9120.

Sincerely,

Stafford Frank

cc:
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